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ABSTRACT

Results are provided from a review of the Health Occupations Education curriculum in New York State to ensure that the skills and attitudes taught in those programs continue to adhere to the emerging demands of the health industry. Introductory materials include summaries of the recommendations and the major background variables influencing the review committee. Changes in the allied health field that have considerable implications for health occupations education are discussed. The majority of the document includes recommendations for improving health occupations education. Among those recommendations are the following: (1) a revised program structure should be developed composed of two large units: direct-patient care occupations and laboratory and support service occupations; (2) curriculum development should strike a middle course between competency-based and content-based organization; (4) the curriculum should be organized to serve a number of different populations; (5) supervised clinical experience should be required; (6) students should be required to attain mastery of all essentials for safe practice in each program; (7) close articulation with guidance services should be maintained; (8) continued contact with employers and special interest groups was recommended. (YLB)

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ED237640

RECOMMENDATIONS OF THE
STATEWIDE HEALTH OCCUPATIONS EDUCATION REVIEW COMMITTEE



LOOKING
TOWARDS
THE
FUTURE IN
THE
HEALTH
OCCUPATIONS

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Institute for Research and Development
in Occupational Education
Center for Advanced Study in Education
The Graduate School and University Center
of the City University of New York

September 1982

PREFACE

Robert S. Graham, M.D.
Committee Chairperson

We are living in a society of ongoing changes. The pace of change in the health care system is as rapid as in any area. This may be in part attributed to the growing realization that the cost of health care in this country is escalating faster than most other costs and that something must be done to contain it. To do so is essential to the economic health of this country where health care costs now account for almost 10 percent of the gross national product. Although health care swallows up this significant percentage of the total we can produce, it is contributing very little towards the improvement of the general health, sense of well-being and individual productivity. Therefore, the next few years will be a period of dramatic changes in the care provided by physicians, hospitals and other institutions as ways are developed to provide more efficient care at less cost. Greater utilization of allied health personnel in providing patient care and in the operation of new technology undoubtedly will occur in order to help accomplish this goal. Some changes in the health care system may in part be related to a new public awareness of individual health, its maintainance and enhancement. This is giving rise to a rapidly proliferating health promotion industry which is largely carried out by allied health personnel. New technology should facilitate health care but it will alter the training requirements of those who provide it.

These factors suggested the importance of reviewing the Health Occupations Education curriculum so that the skills and attitudes taught in those programs could continue to articulate with the emerging demands of the health industry. The State Education Department sponsored a Statewide Health Occupations Education Review Committee to accomplish this task. The Institute for Research and Development in Occupational Education, City University of New York served as the agency facilitating the work of the project. The Committee consisted of 16 members, representing the employers of Health Occupations Education program graduates, professionals from the health industry, occupational educators, and Health Occupations Education educators. A group of Regional Observers also was appointed to serve as two-way dissemination agents for the Committee. That is, the observers publicized the deliberations of the Committee in their respective regions, and fed back comments from their regions to the Committee. Appendix A contains a list of participants. A total of 11 two-day meetings were held since the inception of the Committee's work in April 1980.

The Committee reviewed a wide array of materials in the health field. Nationally respected authorities were recruited to provide input which served as a background for the Committee's deliberations.

A preliminary version of this Final Report was mailed to educational and health personnel interested in Health Occupations Education in March 1982. These groups included area leaders, professional organizations, regional planners, teacher educators, city directors, beginning and experienced teachers, guidance personnel, chief school officers, parents, and others in the health and education communities. In the preliminary report, and in Newsletters disseminated by each of the Regional Observers in their regions within the state, the Committee actively solicited input from the Health Occupations community regarding its deliberations and preliminary recommendations.

After the preliminary report was distributed a series of 48 regional meetings was held around the state in order to gather reactions to the Committee's preliminary recommendations. These meetings were chaired by the Regional Observer from that region of New York State, who then undertook the responsibility of informing the Committee regarding the reactions to the preliminary report. The only agenda for the Committee's 11th meeting, June 16th thru 18th, 1982, was the consideration of reactions to the work of the Committee from various regions. Comments, suggestions, and position papers presented at the various regional meetings were presented to the Committee, which considered the suggestions and then decided whether modifications or additions to the preliminary report were required. The present report, then, has benefited both from the experts providing input to the Committee and from the reactions from the Health Occupations, Industry and Health Communities in New York State.

ACKNOWLEDGEMENT

The Institute for Research and Development in Occupational Education (IRDOE) has acted as the agency for facilitating the work of the Statewide Health Occupations Education Review Committee during this project. The Institute had primary responsibility for recruiting the speakers requested by the Committee, providing staff support for the conduct of all phases of the project, and for disseminating the project results. Since May 1981 the Health Occupations Education Futuring Project was phased in with the Comprehensive Futuring Project in which all of the Occupational Education and Practical Arts Programs in New York State were examined from a futurist perspective.

This project has profited from the assistance of colleagues in the Center for Advanced Study in Education, faculty and staff of the City University of New York and, of course, colleagues at IRDOE. The assistance of Ms. Mara Zibrin, who has served as project associate, and coordinated all phases of the project is gratefully acknowledged. Mara has discharged her many responsibilities conscientiously, cheerfully, and with extraordinary competence.

Many other people contributed hard work, ideas, recommendations and suggestions which helped in our task. Dr. Ruth-Ellen Ostler, Program Manager, Health Occupations Education Section, Bureau of Trade, Technical and Health Occupations Education has provided continuing support for the conduct of this project. As the head of the section whose programs were reviewed, not only did Dr. Ostler support the Committee's recommendations, but she gave of herself, her time and her expertise above and beyond what anyone could have expected. Her cooperation and unselfishness are gratefully acknowledged; without them the project would have been severely hampered. Dr. Willard R. Daggett, Director of Occupational Education has supported the work of this project in all phases. Even though there were numerous conflicting demands on his time, including the coordination of the review of the remaining six Occupational Education programs, he has given the Health Occupations Education project his continuing attention and extended whatever help was required.

Dale M. Post, formerly Director of the Division of Occupational Education Instruction, assisted by speaking at various Committee meetings, and supporting the conduct of this project. Gerald L. Freeborne, now Deputy Commissioner for Elementary, Secondary and Continuing Education supported futuring as a major planning tool in Occupational Education. In a time of cutbacks and shrinking

resources for education in general and Occupational Education in particular educational statesmanship, courage and wisdom were required for the support of these activities. Our project was fortunate that Commissioner Freeborne, Director Post and Dr. Daggett had all of these qualities in abundance.

Without the support of all of these individuals the project could not have been conducted. We hereby thank them all.

Sigmund Tobias
Project Director

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SUMMARY OF RECOMMENDATIONS

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The Statewide Health Occupations Education Review Committee made the following recommendations:

- 1) A revised program structure composed of two large units: Direct-Patient Care Occupations and Laboratory and Support Service Occupations. (p.8-9)
- 2) Curriculum development should proceed in a series of related cores. The basic core, including such units as decision-making skills, employability skills, etc., was presumed to be applicable to all students in Occupational Education. (p.10-14)
- 3) A second set of competencies clusters was identified as a Health Occupations Education core, including such categories as asepsis, health resources, etc. This core was presumed to apply to all students in Health Occupations Education. (p.10-15)
- 4) A third core was applicable to students in either the Direct-Patient Care or the Laboratory and Support Service Occupations. (p.15-17)
- 5) Finally, a fourth set of core areas was identified. These consist of competencies common to several, though not all, programs in either the Direct-Patient Care or Laboratory and Support Service Cores. (p.16-18, 20,21)
- 6) The program organization is summarized in Figures 1 and 2. The different competencies in each of the clusters are illustrated in Tables 2 and 3. (p.16,17 11-14, 20-21)
- 7) The revised program should strike a middle course between competency based and content based organization. (p.24-25)
- 8) The curriculum should be so organized as to serve a number of different populations. (p.25-26)
- 9) Supervised clinical experience should be required, or clinical competence demonstrated in those health occupations having clinical functions in interactions with patients, but would not be needed in other health occupations. (p.26-27)
- 10) Health Occupations Education teachers should have practical employment experience in the area of their specialty, adequate technical and general education, as well as teacher preparation. (p.27-28)

SUMMARY OF RECOMMENDATIONS

Page No.

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| 11) | Articulation with post secondary programs, and with related secondary and adult programs should be pursued whenever possible. | (p.29) |
| 12) | Students should be required to attain mastery of <u>all</u> essentials for safe practice in each program. A statewide evaluation system was also recommended. | (p.29-30) |
| 13) | Close articulation with guidance services should be maintained. | (p.30) |
| 14) | Changes in the Commissioner's Regulations dealing with the Health Occupations Education program should be postponed until changes, if any, in the other Occupational Education and Practical Arts program are made. | (p.30-31) |
| 15) | Position papers commissioned by the Committee regarding costs should be transmitted to the curriculum development teams to guide their efforts. | (p.31) |
| 16) | Appropriate recognition should be conferred upon students successfully completing Health Occupations Education programs. | (p.31) |
| 17) | Continued contact with employers was recommended so that information regarding staff needs, job skills required, program revisions, and related matters can be exchanged. | (p.31-32) |
| 18) | Contact with interested groups, individuals, and with parent organizations should be maintained so as to involve them in developments in Health Occupations Education programs. | (p.32) |

Introduction

The Health Occupations Education Review Committee was appointed to study the New York State Health Occupations Education Program. Preparing qualified health occupations personnel who can deliver effective, efficient, and humane health care to the population of New York State is and will continue to be the major objective of the Health Occupations Education Program in New York State. This goal of the Health Occupations Education Curriculum articulates with the general purpose of providing effective health care to the population of New York State.

The Committee's special concern was to review the instructional delivery system and curricula in the statewide Health Occupations Education program from a futurist perspective. This perspective was dictated by the fact that practices and procedures in the health occupations have undergone major changes within the last two decades. An ever increasing number of allied health functions are being changed by new technology and there is every reason to believe that changes in the next two decades will be even more dramatic and far-reaching. Similarly, the crisis in the cost of health care and the shift from an infectious disease model to a health management or prevention model will lead to further changes in the health care field. The attitudes, competencies, knowledge and skills required of health occupations personnel have undergone major changes in the past. These requirements will continue to change as automation becomes an increasingly important factor in the homes, places of work, and health facilities of the state, the nation and the world. It is, therefore, vital that recommendations take into account these expected technological advances, the altered needs of the health delivery system and, in turn, the new competencies required of graduates from Health Occupations Education programs.

In its deliberations the Committee received input from a large group of experts from different fields. These included futurists in general, futurists in the allied health area, human resources experts, social scientists devoted to the study of health, experts affiliated with a variety of health facilities, health planners, and prominent health educators. This input was received from presentations delivered at meetings and position papers prepared for the Committee. This information formed the background for the Committee's deliberations throughout this project.

Committee and Regional Observers

The Statewide Health Occupations Education Review Committee consisted of 17 members representing employers and potential employers of health occupations personnel, experts from various allied health settings, and allied health and health occupations educators. In addition, 16 Regional Observers were appointed in order to conduct two-way dissemination activities. These Regional Observers informed the field of Committee activities and, in turn, informed the Committee of reactions to its work from the field. A listing of Committee members, Regional Observers and their affiliations can be found in Appendix A of this report.

The Committee Members and Regional Observers had considerable knowledge and experience that enabled them to evaluate the input from consultants. The perspectives represented by these groups included health planning, health insurance, administration of different types at health facilities, and public, private and parochial education, from urban, suburban and rural educational districts. Organized labor was also represented both on the Committee and among the Regional Observers.

Background Variables to Committee Recommendation

The Committee received a wide range of input during the more than two years of its deliberation. The presentations made to the Committee are available in three annual reports of Committee activities.^{1,2,3} Some of the major factors influencing the Committee are briefly summarized here. Extensive documentation of these factors can be found in the annual reports.

Demographic Variables

The projections for New York State indicate that within the next 10 years there will be a decline of approximately 37% in the secondary school student population in the state. This decline is contributed to by the fact that the post World War II "baby boom" generation was followed by a marked decline in the birth rate. Children from this period of lowered birth rate will be going through the secondary school system of the state in the next decade. One can, therefore, expect that those Health Occupations Education programs which have been experiencing some difficulty in attracting students will experience even greater difficulties in the immediate future. Programs which have attracted an adequate number of students

in the past may well experience difficulties in the near future due to the reduced secondary school population.

The changing status and aspirations of women is another important variable in planning for an effective Health Occupations Education program. A variety of factors have combined to expand the educational and vocational opportunities of female secondary school students. Whereas female students once had been content to plan for careers as hospital aides, licensed practical or registered nurses, many of these young women now aspire to careers as health administrators, health supervisors, and other upper level professional positions in the health and other fields. These factors will, then, also operate to reduce the population pool from which Health Occupations Education students traditionally have been drawn.

Another demographic factor of importance is the fact that an increasing percentage of new workers in all fields is likely to come from minorities. Rising aspirations and opportunities for members of minority groups in the population may, as in the case of women, reduce the number of students enrolling in Health Occupations Education programs.

Human Resources Factors

In the mid 1980's the post World War II "baby boom" population will be entering a period in which members of this group will be starting their fourth decade of life. The demand for allied health services increases considerably in the 40's and continues at a high level through the remainder of the life span. It should be noted that the percentage of the population in this age group will be larger by 1990 than has ever been the case in the history of this country. The proportion of the population requiring more intense health care will, therefore, also be larger than ever before.

The increased demand for greater health services by an aging population will occur at about the same time as a reduced work force is filling entry level occupations in all fields, including the health occupations. The decreased work force is, of course, a result of the reduced birth rate of the second generation after the Second World War. These factors suggest that there will perhaps be the greatest need in history for allied health personnel to serve an aging population from a reduced pool of entry level employees available for staffing those positions.

Changes in Allied Health Field

A number of factors have led and will continue to lead to important changes in the allied health fields which have considerable implications for Health Occupations Education.

Chronicity of Illnesses

The aging character of the US population leads to the prediction that a greater percentage of health care resources will be required for the care of chronic and probably incurable conditions. It can be expected that the percentage of effort devoted to the treatment of acute conditions will drop and the resources devoted to chronic, long-term care increase. A premium will, therefore, be placed on the type of care which will enable individuals with chronic conditions to live as comfortably as possible with long-term illnesses. Moreover, there has been a marked increase in the longevity of the population. It can, therefore, be expected that the percentage of people requiring long-term care will increase dramatically. Health occupations personnel should, consequently, be trained to render long-term, maintenance care for individuals. Such care puts a premium on consideration, kindness and patience to a far greater degree than does acute care.

Automation

New technology has assumed an ever larger role in society in general and in the health occupations in particular. The practices and procedures in contemporary medical laboratories, for example, have little in common with those which existed as little as 10 years ago. Automated devices in medical laboratories can conduct a large variety of tests more rapidly and with greater consistency than could have been accomplished by equipment and personnel available 10 years ago. There is every reason to believe that new technology will continue to extend the range, complexity, and efficiency of dental and medical laboratories of the future.

It is equally likely that advanced technology will make similar inroads in all aspects of various allied health facilities. Recordkeeping and billing have already been converted to data processing equipment in most medical facilities. Equipment monitoring the condition of patients in emergency rooms, coronary care and intensive care units is also already in place. The best present estimate is that automation will increase so rapidly that by the end of the next decade hospitals will be utilized exclusively for postsurgical, rehabilitative and terminal (hospice) care.

Other types of care are likely to be given in satellite centers on an out-patient basis. The decline in the use of hospital related care and the increasing utilization of satellite centers will probably be accompanied by the conversion of many health monitoring and treatment practices to control by data processing equipment.

The increasing utilization of automated equipment has several important implications for health occupations personnel. First, some functions currently exercised by health occupations personnel undoubtedly will be converted to computer equipment, thus changing the duties of these workers. Secondly, health occupations personnel should have some familiarity with computer equipment and the various interfaces between users and equipment in order to feel familiar and comfortable in an environment in which data processing and related equipment will routinely and increasingly interact with health occupations personnel. Third, the use of new technology is likely to enable the delivery of a greater range and variety of services in health facilities than is presently the case. All of these factors, obviously, have important implications for the type of training health occupations personnel should be given for assuming jobs in the present and particularly in the future.

Home Care

The increasing chronicity and the greater use of technology and communication devices in allied health settings both suggest that the home will grow in importance as a treatment site for many health problems. It, therefore, is essential to anticipate these needs and train individuals who could exercise their functions in the home environment where immediate supervision is not directly available. Health occupations personnel will have to be instructed in the utilization of good judgment and effective interpersonal relations skills for establishing alliances with family members and others present in the home milieu who in the future will become, to an increasing degree, allied treatment personnel.

Health Maintenance and Prevention

There has been a shift in orientation regarding health care delivery. More and more people in organizations are actively assuming responsibility for their own health, in recognition of the fact that the greatest threats to health are not infectious diseases but degenerative diseases resulting from life long habits, environmental and safety hazards, and stress. These developments are markedly

expanding the fields of health education, nutrition, weight control, control of smoking, alcohol and other substance abuse, exercise physiology, and stress management. The development of these new fields will lead to an expansion in the utilization of health occupations personnel to discharge critical health maintenance functions in each of these specialties. The Committee took these developments into account in making its final recommendations.

Reorganization of Health Occupations Education Programs

The developments described previously led the Committee to recommend a reorganization of the statewide Health Occupations Education program structure. The reorganization had as its major focus concern that students receive the kind of preparation most likely to meet present and emerging employment requirements. In view of the rapid changes in the health occupations, the revised Health Occupations Education program should be capable of preparing students with skills, knowledge and attitudes required on the job both in the present and in the foreseeable future. Such preparation should make students more readily employable and more capable of adapting to changes in practices and procedures once they are on the job. Concern was also given to recommending a curriculum which would be educationally sound both in the present and for the foreseeable future with provisions for rapid and effective updating as it becomes necessary due to technological changes. Finally, the revised curriculum structure will lead to more effective administration and organization of the new program structure and more efficient curriculum development.

The concerns described above led to a recommendation that the statewide Health Occupations Education program be reorganized into two large units: Direct Patient Care Occupations, and Laboratory and Support Services Occupations. This reorganization does not necessarily imply reduction in programs. Rather, existing programs should be reorganized into larger entities so that common areas of competence, knowledge, skills and attitudes will be shared to the greatest degree possible. Table 1, on the next page, lists the titles of all the occupations covered by the new program at present. Changes in currently recognized titles reflecting new occupations are expected to emerge as a result of changes in the health field.

Combining smaller programs of questionable viability into larger units, such as

TABLE 1
HEALTH OCCUPATIONS TITLES¹

- 1.0 Direct Patient Care Occupations²
 - 1.1 Dental/Medical-Administrative Occupations
 - 1.11 Dental Assistant-Administrative
 - 1.12 Medical Assistant-Administrative
 - 1.13 Ward Clerk
 - 1.2 Dental/Medical-Clinical Occupations
 - 1.21 Dental Assistant-Clinical
 - 1.22 Medical Assistant-Clinical
 - 1.221 Orthopedic Aide
 - 1.222 Podiatric Aide
 - 1.223 Other Medical Specialty Aide(s)
 - 1.23 EKG Technician
 - 1.24 EEG Technician
 - 1.25 Emergency Medical Technician
 - 1.3 Nursing Care Occupations
 - 1.31 Practical Nurse (Licensed)
 - 1.32 Nursing Aide
 - 1.321 Geriatric Aide
 - 1.322 Psychiatric Aide
 - 1.323 Homemaker/Home Health Aide
 - 1.324 Other Aide(s)
 - 1.4 Rehabilitation occupations
 - 1.41 Respiratory Therapy Aide³
 - 1.42 Occupational Therapy Aide
 - 1.43 Physical Therapy Aide
 - 1.44 Recreational (Therapy) Aide
 - 1.45 Rehabilitation Aide
 - 1.46 Orthotics/Prosthetics Aide
- 2.0 Laboratory and Support Occupations⁴
 - 2.1 Dental Laboratory Technician
 - 2.2 Medical Laboratory Technician/Assistant
 - 2.3 Pharmacy Aide
 - 2.4 Central Supply Worker
 - 2.5 Morgue Aide

¹Groupings are based on similarities in the areas of competence required by occupations in existing program titles. They can be expected to change with changes in the health field.

²Common cores among various subgroups in the direct patient care occupations may emerge at a later date.

³Final placement of Respiratory Therapy Aide pending.

⁴Common cores among various subgroups in the laboratory and support occupations may emerge at a later date.

the two categories of Direct Patient Care, and Laboratory and Support Services, may make it easier to maintain faculty and programs, and reduce difficulties in attracting and retaining students. Such programs will become more viable since fewer unique resources will need to be devoted to them in the proposed reorganization. It is recognized that there will be differences in the specific programs offered in the various regions of the state based upon student need and employment demand.

Occupational Education Core

All students in the Health Occupations Education Program will be expected to master a set of competencies identified by the Health Occupations Education Committee as the Occupational Education Core. These areas of competence were considered important for entry level personnel not only in the Health Occupations, but in all Occupational Education areas. These clusters of areas of competence and the priorities assigned to them by the Committee are displayed in Table 2.

The Committee recommended that the competencies in the Occupational Education cluster be reviewed by other futuring committees with a view towards considering their adoption for all Occupational Educational programs. It was reasoned that the knowledge and clusters of competencies in the Occupational Education Core were likely to be equally applicable in other Occupational Education programs. It was noted, for example, that similar competencies were recommended by the Business Education Review Committee,⁴ even though, at that time they were not labeled as an Occupational Education Core. While this futuring committee obviously cannot recommend competencies in other programs and cannot foresee the deliberations of committees reviewing those programs, it was, nevertheless, recommended that irrespective of the outcomes of deliberations concerning the remaining Occupational Education programs, the competencies in the Occupational Education Core be required of all Health Occupations Education students. It should be noted that the Committee voted to support the inclusion of some additional competency areas in the Occupational Education Core as these may be developed by the ongoing comprehensive futuring project.

Health Occupations Core

A second set of competencies recommended by the Committee was identified as areas of knowledge and competence considered common to all job titles in the

Table 2

PRIORITIES ASSIGNED TO OCCUPATIONAL EDUCATION,
HEALTH OCCUPATIONS EDUCATION AND TECHNICAL CORE COMPETENCIES

The three levels are:

OE = all students in Occupational Education
HOE = all students in Health Occupations Education
TECH = technical level programs in Health Occupations Education

The priorities used are:

1= student must have the competency
2= student should have the competency
3= it would be desirable for student to have it, time permitting
X= does not apply

	OE	HOE	TECH
1a. Introduction to Careers in Vocational Education	1	2	X
1b. Employability Skills	1	1	1
1b.1 Dress, grooming	1	1	1
1b.2 Punctuality	1	1	1
1b.3 Politeness	1	1	1
1b.4 Job readiness	1	1	1
1b.5 Exercising appropriate initiative	1	1	1
1b.6 Interview skills	1	1	1
1b.7 Basic competencies: Reading, writing, math	1	1	1
1b.8 Study skills, use of media, test taking skills	1	1	1
1b.9 Responsibility for self care: Hygiene, nutrition, etc.	1	1	1
1b.10 Realistic orientation to the world of work: identifying power/influence - job hierarchies.	2	1	1
1b.11 Identifying lifestyle of organization-physical and sociological aspects	2	1	2
2. Communication Skills --Written/Verbal	1	1	1
2.1 Telephone etiquette	1	1	1
2.2 Recording & reporting	1	1	1

	OE	HOE	TECH
2.3 Terminology	<u>1</u>	<u>1</u>	<u>1</u>
2.4 Listening - observation	<u>1</u>	<u>1</u>	<u>1</u>
2.5 Computer literacy	<u>1</u>	<u>X</u>	<u>1</u>
3. Interpersonal Skills	<u>1</u>	<u>1</u>	<u>1</u>
3.1 Cooperation/collaboration	<u>1</u>	<u>1</u>	<u>1</u>
3.2 Team responsibilities	<u>2</u>	<u>1</u>	<u>1</u>
3.3 Team building	<u>1</u>	<u>1</u>	<u>1</u>
3.4 Assertiveness - self esteem	<u>1</u>	<u>1</u>	<u>1</u>
3.5 Acceptance of directions	<u>1</u>	<u>1</u>	<u>1</u>
3.6 Conflict resolution	<u>1</u>	<u>1</u>	<u>1</u>
3.7 Sensitivity to needs of others: Assuming consumer (patient) perspective	<u>1</u>	<u>1</u>	<u>1</u>
3.8 Rendering humane patient care (kind, warm, com- passionate)	<u>X</u>	<u>1</u>	<u>1</u>
3.9 Respect for rights and feelings of others	<u>1</u>	<u>1</u>	<u>1</u>
3.10 Principles of behavior modification	<u>3</u>	<u>2</u>	<u>1</u>
4. Organization: Management of Self	<u>2</u>	<u>1</u>	<u>1</u>
4.1 Self management - scheduling, etc.	<u>2</u>	<u>1</u>	<u>1</u>
4.2 Organization of work	<u>2</u>	<u>1</u>	<u>1</u>
4.3 Independent functioning where appropriate	<u>2</u>	<u>2</u>	<u>1</u>
4.4 Decision making skills:			
4.4a Establish priorities	<u>2</u>	<u>1</u>	<u>1</u>
4.4b Organization	<u>2</u>	<u>1</u>	<u>1</u>
4.4c Finding and using information	<u>2</u>	<u>1</u>	<u>2</u>
4.4d Problem solving	<u>2</u>	<u>2</u>	<u>1</u>
4.4e Time management	<u>2</u>	<u>1</u>	<u>2</u>

	OE	HOE	TECH
5. Ethics	<u>3</u>	<u>1</u>	<u>1</u>
5.1 Confidentiality	<u>3</u>	<u>1</u>	<u>1</u>
5.2 Patients' rights	<u>X</u>	<u>1</u>	<u>1</u>
5.3 Legal implications	<u>X</u>	<u>1</u>	<u>1</u>
5.4 Legally delayable duties	<u>X</u>	<u>2</u>	<u>1</u>
5.5 Legal limits on duties	<u>X</u>	<u>1</u>	<u>1</u>
6. Stress	<u>2</u>	<u>2</u>	<u>1</u>
6.1 Stress identification	<u>2</u>	<u>2</u>	<u>1</u>
6.2 Stress management	<u>2</u>	<u>2</u>	<u>1</u>
6.3 Conflict management	<u>3</u>	<u>2</u>	<u>1</u>
7. Human Development and Sexuality	<u>2</u>	<u>1</u>	<u>1-3</u>
7.1 Dealing with mental impairment	<u>X</u>	<u>2</u>	<u>1-3</u>
7.2 Knowledge of mental disorders	<u>X</u>	<u>2</u>	<u>1-3</u>
7.3 Responses to death and grief management	<u>X</u>	<u>1</u>	<u>1-3</u>
7.4 Human sexuality	<u>3</u>	<u>2</u>	<u>1-3</u>
7.5 Human sexuality in health settings	<u>X</u>	<u>2</u>	<u>1-3</u>
7.6 Right of sexual privacy	<u>2</u>	<u>1</u>	<u>1-3</u>
7.7 Principles of aging - physical/mental	<u>X</u>	<u>1</u>	<u>1-3</u>
8. Safety	<u>1</u>	<u>1</u>	<u>1</u>
8.1 First Aid	<u>1</u>	<u>1</u>	<u>1</u>
8.2 Asepsis	<u>2</u>	<u>1</u>	<u>1</u>
8.3 Body mechanics - basic principles to prevent future disorders.	<u>1</u>	<u>1</u>	<u>1</u>
8.4 CPR	<u>2</u>	<u>1</u>	<u>1</u>
8.5 Heimlich	<u>2</u>	<u>1</u>	<u>1</u>

	OE	HOE	TECH
8.6 Fire Safety	<u>1</u>	<u>1</u>	<u>1</u>
8.7 Accident prevention	<u>1</u>	<u>1</u>	<u>1</u>
9. Applied Life and Physical Sciences	<u>X</u>	<u>1</u>	<u>1-3</u>
9.1 Scientific basis for infection control	<u>X</u>	<u>1</u>	<u>1-3</u>
9.2 Structure and function of the body	<u>X</u>	<u>1</u>	<u>1-3</u>
9.3 Nutrition principles	<u>X</u>	<u>1</u>	<u>1-3</u>
9.4 Other necessary science principles	<u>X</u>	<u>1</u>	<u>1-3</u>
10. Career Development: Contemporary Health Careers	<u>X</u>	<u>1</u>	<u>1</u>
10.1 On-site visits to give realistic understanding for roles in health care	<u>X</u>	<u>1</u>	<u>1</u>
10.2 Team functioning	<u>X</u>	<u>1</u>	<u>1</u>
10.3 Job expectancies	<u>X</u>	<u>1</u>	<u>1</u>
10.4 Orientation to new delivery systems	<u>X</u>	<u>1</u>	<u>1</u>
10.5 Awareness of importance of continuing education.	<u>X</u>	<u>1</u>	<u>1</u>
10.6 Awareness of "wellness" model	<u>X</u>	<u>1</u>	<u>1</u>
10.7 Avoidance of sex-role stereotypes	<u>X</u>	<u>1</u>	<u>1</u>
10.8 Identification of relevant professional societies	<u>X</u>	<u>1</u>	<u>1</u>
10.9 Knowledge of general community resources : Health and Crises Intervention	<u>1</u>	<u>1</u>	<u>1</u>
11. Costs	<u>X</u>	<u>2</u>	<u>1</u>
11.1 Avoidance of waste	<u>X</u>	<u>2</u>	<u>1</u>
11.2 Knowledge of economics of health care	<u>X</u>	<u>2</u>	<u>1</u>
11.3 Awareness of responsibility to reduce costs	<u>X</u>	<u>2</u>	<u>1</u>

Health Occupations Education program. It was reasoned that these health occupations competencies should be mastered by students in all Health Occupations Education programs, whether Laboratory and Support based or Direct Patient Care. This set of core competencies is also found in Table 2, together with the priorities assigned to them by the Committee.

Overlap of Categories

It should be noted that in Table 2 many areas of competence are given priorities in the Occupational Education Core, the Health Occupations Core, and, in some cases, in the Technical Clusters as well. It was reasoned by the Committee that different aspects of each of these areas of competence should be taught at different levels, to reinforce and apply directly to the health care field, rather than merely repeat the subjects. For example, in areas dealing with appropriate dress and grooming, appearing under the rubric of Employability Skills in Table 2, it was reasoned that neatness and appropriate dress will be covered in the Occupational Education Core. In the Health Occupations Education Core the significance and importance of different uniforms in health facilities will be stressed. In some of the technical areas dress may be covered again, though in a different manner. At that point the importance of specific asepsis would be covered so that employees dealing with different health care functions would master the importance of appropriate dress as it is related to the maintenance of asepsis.

Area Competencies

A third set of core areas of competence was recommended by the Committee. These competencies were considered to be common to either the Direct Patient Care or the Laboratory and Support Services occupations. Mastery of these competencies would be required of students in all programs in either of the two areas, but not in both. That is, students preparing for jobs in the Direct Patient Care category would be required to master this core but students in the Laboratory and Support Services group would not. These area core clusters will be developed by the curriculum development teams by combining areas of competence and knowledge recommended by the Committee for all of the occupations within each area. Figures 1, and 2 displayed on the succeeding pages, depict the relationships between the different sets of core competencies in graphic form.

It should be noted that titles of specific programs were omitted in Figure 1.

FIGURE I: PROJECTED PROGRAM STRUCTURE

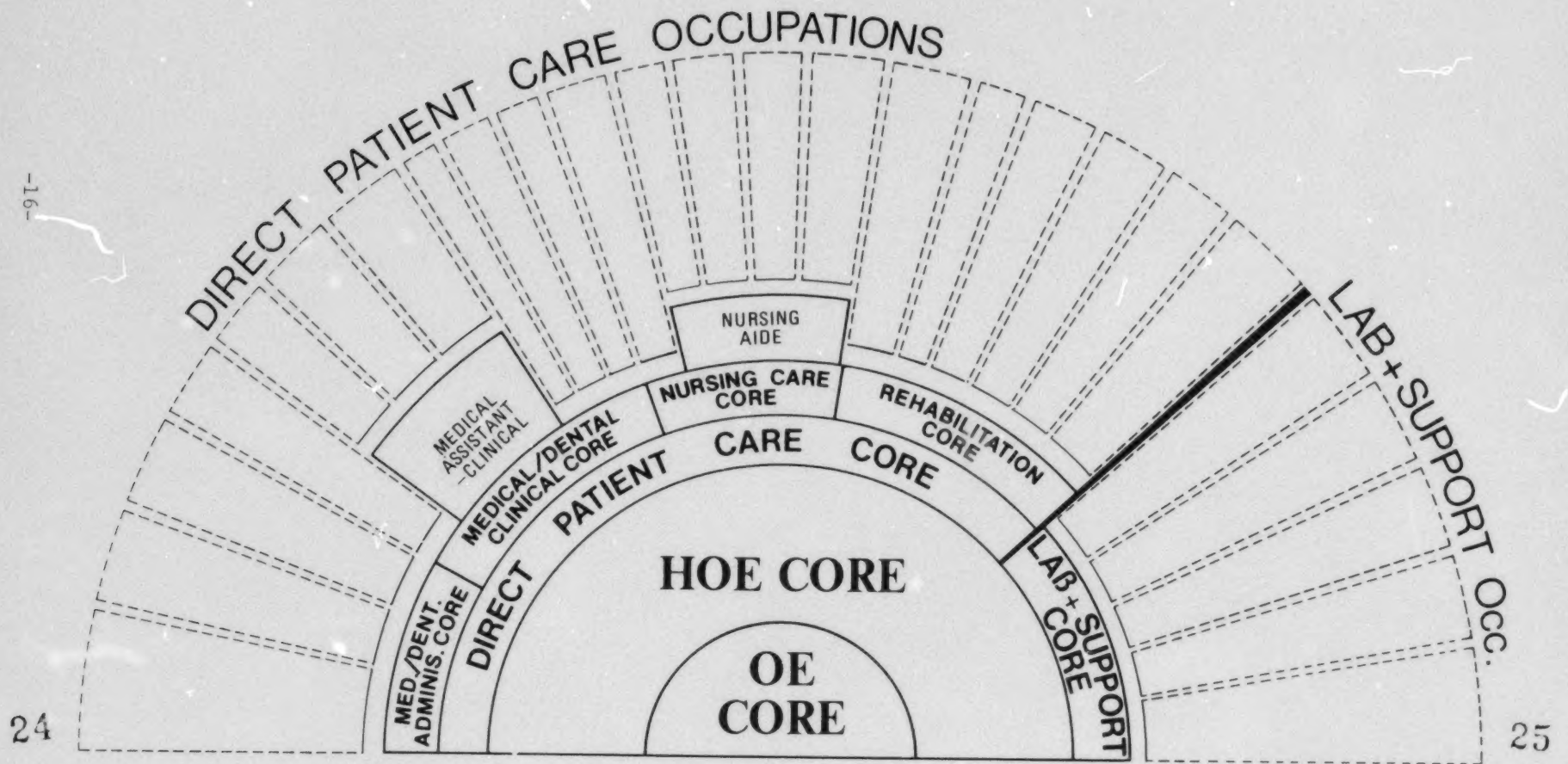
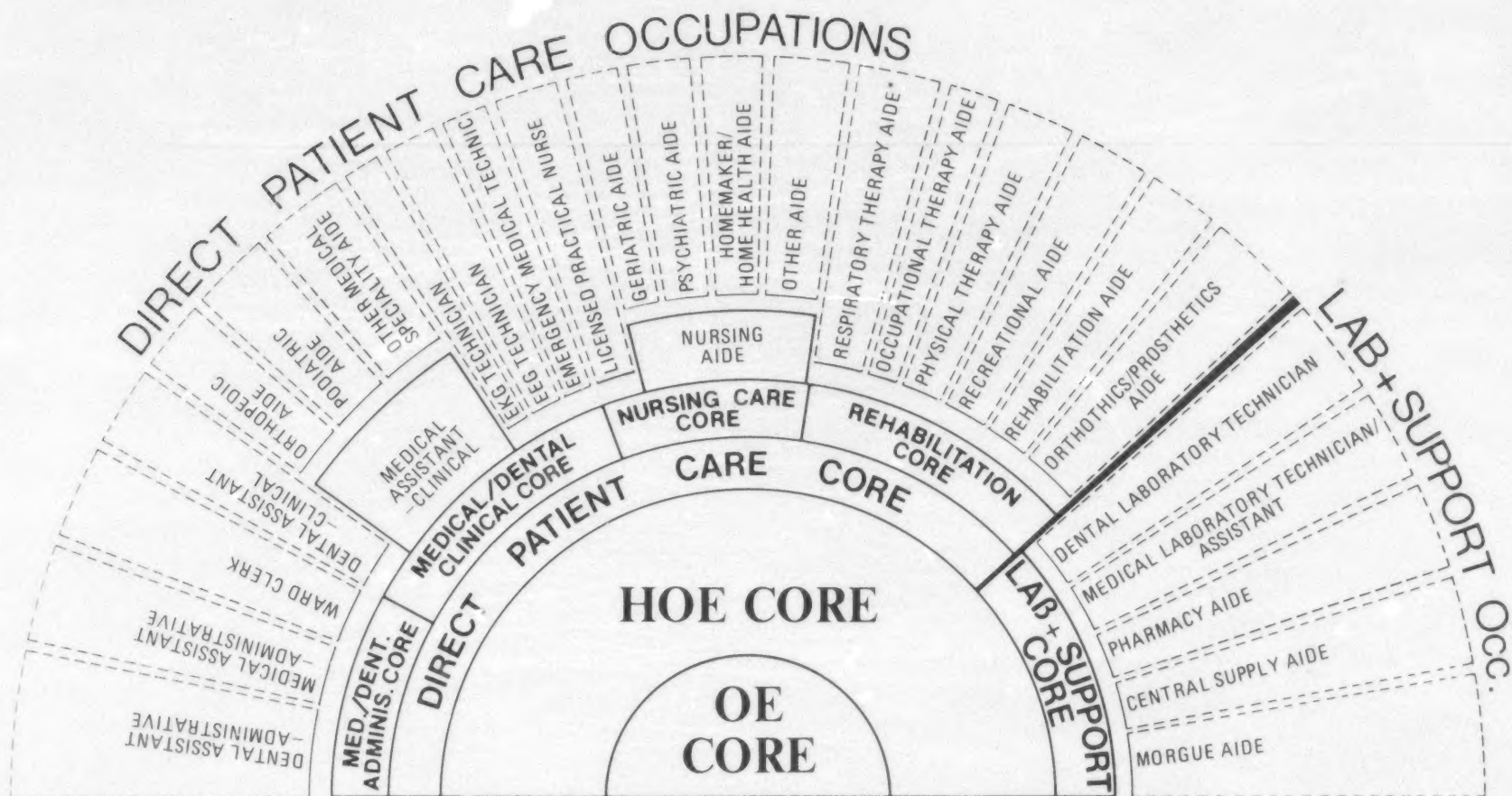


FIGURE 2: PROJECTED PROGRAM STRUCTURE WITH JOB TITLES



The Committee recognized that many of the current Health Occupations Education programs may be subject to considerable change as new practices, procedures, and equipment are introduced in the field. While the Committee recommended the flexible program structure in Figures 1 and 2, it recognized that existing titles as shown in Figure 2 may change and new titles and programs emerge. For example, new titles such as Electronic Equipment Manager, Nuclear Health Technician, Environmental Health Aide as well as expanded titles in Ward Management, Home Health Care and Community Health Care are presently being discussed in various regions of the State. As needs for such personnel emerge it can be expected that new programs will be devised for these specialties or existing programs modified. Such changes should not affect the viability of the proposed program structure. The broken or dotted lines are meant to indicate that programs designed to develop specific technical competencies for specific programs are visualized as "plug-in-pull-out" components which will be modified as necessary in order to respond to technological developments as they occur in the field.

Core Competencies for Several Programs

A fourth set of core areas of competence is identified in Figure 1 and 2. These competencies were considered to be common to several programs, though not to all programs in either the Direct Patient Care or the Laboratory and Support Services cores. For example, dental assistants-administrative, ward clerks and medical assistants-administrative were all thought to require competence in keeping records, scheduling appointments, typing forms, bookkeeping, filing, and similar tasks irrespective of other competencies specific to the job. The medical-dental administrative core, depicted in Figures 1 and 2, represents these competencies. The specific areas of competence and knowledge and the priority assigned to them by the Committee are displayed in Table 3 appearing on succeeding pages.

Technical Program Competencies

A final group of competency clusters and areas of knowledge recommended by the Committee was unique to each of the specific technical programs. Figure 2 reproduces the program structure displayed in Figure 1 with the addition of the unique set of competencies to be required in each of the existing Health Occupations Education programs presently proposed. It should be reemphasized that changes in the existing titles and additions of the new titles are expected to keep

pace with changing equipment, practices and procedures in the health field. Table 3 lists some of the competency clusters and knowledge to be required of each of the technical programs.

Advantages of Proposed Program Structure

The program structure recommended by the Committee, as displayed in Figures 1 and 2 and in Tables 2 and 3, has several important advantages over other possible organizations. These advantages were considered so compelling that the Committee recommended this structure, despite the fact that it puts a premium on careful organization and interaction among health occupations educators in different programs.

Rapid Updating of Curriculum

One of the advantages of the proposed reorganization is the speed with which the curriculum can be modified. As has been indicated above, change in the health occupations has been and will continue to be fairly rapid. As old procedures and equipment become obsolete and new practices are adopted, curricula have to be adjusted so that students can continue to be prepared with relevant skills required on the job. The structure of competencies recommended by the Committee makes such updating relatively convenient. The skills requiring the most rapid change are likely to be those specific to a particular program. For example, technical competencies required of the dental assistant-clinical change very quickly as new equipment or practices are adopted. These competencies might constitute one module or set of modules to be required in the dental assistant-clinical program. The proposed organization would make it relatively simple to replace a module, or a series of modules which focus on more current competencies in that particular program without requiring change in the rest of the program.

The Committee reasoned that the rate of change in Health Occupations Education Programs would be most rapid at the outermost extremes of Figure 2 and least rapid in the center. That is, change has been and is likely to be most rapid in technical equipment and procedures required for each of the occupations, less rapid in the competencies common to a number of areas, and least rapid in the Health Occupations Education and Occupational Education Cores. Thus, least change in the next decade or two is likely to occur in such categories as employability skills,

TABLE 3
TECHNICAL/GENERIC
AREAS OF COMPETENCY

TABLE 3 TECHNICAL/GENERIC AREAS OF COMPETENCY		DIRECT PATIENT											CARE OCCUPATIONS											LABORATORY AND SUPPORT OCCUPATIONS				
		DENTAL/ MEDICAL- ADMIN.			DENTAL/MEDICAL-CLINICAL								NURSING CARE						REHABILITATION									
		DENTAL ASSISTANT-ADMIN.	MEDICAL ASSISTANT-ADMIN.	WARD CLERK	DENTAL ASSIST.-CLINICAL	MEDICAL ASSIST.-CLINICAL	ORTHOPEDIC AIDE	PODIATRIC AIDE	OTHER MED. SPEC. AIDE	EKG TECHNICIAN	EEG TECHNICIAN	EMERGENCY MED. TECH.	PRACTICAL NURSE	NURSING AIDE	GERIATRIC AIDE	PSYCHIATRIC AIDE	HOMEMAKER/ HOME HEALTH AIDE	OTHER AIDES	RESPIRATORY THERAPY AIDE	OCCUPATIONAL THERAPY AIDE	PHYSICAL THERAPY AIDE	RECREATIONAL THERAPY AIDE	REHABILITATION AIDE	ORTHOTICS/PROSTHETICS AIDE	DENTAL LAB TECHNICIAN	MEDICAL LAB TECHNICIAN	PHARMACY AIDE	CENTRAL SUPPLY WORKER
1.	MAINTAIN SURGICAL ASEPSIS				X	X	X	X	X		X	X	X			X	X	X		X		X			X	X	X	
2.	PERFORM ADVANCED MEDICAL ASEPSIS										X	X	X			X	X								X		X	
3.	MAKE BEDS											X	X	X	X	X	X											
4.	PREPARE A UNIT				X	X	X	X	X		X	X	X	X	X	X	X											X
5.	COMMUNICATE WITH PATIENT/CLIENT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	?	X		
6.	MAINTAIN CLIENT MOBILITY					X	X		X		X	X	X	X	X	X	X		X	X	X	X	X					
7.	POSITION CLIENT				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	?	X			
8.	MAINTAIN CLIENT'S HYGIENE				X							X	X	X	X	X	X				?							
9.	MAINTAIN CLIENT'S NUTRITION				X	X			X			X	X	X	X	X	X											
10.	MAINTAIN CLIENT'S ELIMINATION											X	X	X	X	X	X					X						
11.	ASSESS (MEASURE) CLIENT'S CONDITION			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	?	X			X
12.	ASSESS PATIENT/CLIENT NEEDS											X																
13.	OBSERVE, RECORD, REPORT ON CLIENT'S CONDITION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X			
14.	APPLY SUPPORTIVE/PROTECTIVE DEVICES				X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X					
15.	ADMINISTER EXTERNAL TREATMENTS				?	X	X	X	X		X	X	X	X	X	X	X						X					
16.	ADMINISTER INTERNAL TREATMENTS				?							X	X	X	X	X	X											
17.	ADMINISTER MEDICATIONS				X							X			?													
18.	ADMINISTER THERAPEUTIC ACTIVITIES				X	X						X	X	X	X	X	X		X	X	X	X	?					
19.	PROMOTE SELF RELIANCE AFTER ACUTE INCIDENT					X	X	X	X			X	X	X	X	X	X		X	X	X	X	X					
20.	COLLECT SPECIMENS				X	X						X	X	X	X	X	X								X			X

AREAS OF COMPETENCY
(TECHNICAL/GENERIC)
(continued)

AREAS OF COMPETENCY (TECHNICAL/GENERIC) (continued)	DIRECT PATIENT CARE OCCUPATIONS																							LABORATORY AND SUPPORT OCCUPATIONS					
	DENTAL/ MEDICAL - ADMIN.			DENTAL/MEDICAL - CLINICAL								NURSING CARE						REHABILITATION											
	DENTAL ASSIST. -ADMIN.	MEDICAL ASSIST. - ADMIN.	WARD CLERK	DENTAL ASSIST. - CLINICAL	MEDICAL ASSIST. - CLINICAL	ORTHOPEDIC AIDE	PODIATRIC AIDE	OTHER MED. SPEC. AIDE	EKG TECHNICIAN	CEG TECHNICIAN	EMERGENCY MED. TECH.	PRACTICAL NURSE	NURSING AIDE	GERIATRIC AIDE	PSYCHIATRIC AIDE	HOMEMAKER/ HOME HEALTH AIDE	OTHER AIDES	RESPIRATORY THERAPY AIDE	OCCUPATIONAL THERAPY AIDE	PHYSICAL THERAPY AIDE	RECREATIONAL THERAPY AIDE	REHABILITATION AIDE	ORTHOTICS/ PROSTHETICS AIDE	DENTAL LAB TECHNICIAN	MEDICAL LAB TECHNICIAN	PHARMACY AIDE	CENTRAL SUPPLY WORKER	MORGUE AIDE	
21. PERFORM LABORATORY PROCEDURES				X	X		X					X	X	X	X	X								X	X				?
22. PERFORM DIAGNOSTIC PROCEDURES				X	X		X		X	X		X	X	X	X	X										X			
23. CARE FOR NEWBORN INFANT					X						X	X	X	X		X													
24. KEEP RECORDS	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
25. PERFORM ADMINISTRATIVE OFFICE PROCEDURES	X	X	X	X	X	X	X																					X	
26. SCHEDULE PATIENT/CLIENT APPOINTMENTS	X	X	X	X	X		X		X	X														X		X			
27. PERFORM APPRO. RECEPTION/BUSINESS PROCEDURES	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
28. MAINTAIN SUPPLIES, EQUIPMENT	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
29. INVENTORY CONTROL, MATERIAL STORAGE PROCEDURES	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
30. EXECUTE APPROPRIATE SAFETY PROCEDURES	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
31. PERFORM EMERGENCY PRACTICES, PROCEDURES			X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
32. PERFORM RELATED SPECIFIC PROCEDURES			X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
33. IDENTIFY NORMAL AGING PROCESS				X	X	X	X					X	X	X	X	X		X	X	X	X	X	X						
34. DEMONSTRATE TEAM MANAGEMENT SKILLS												X																	
35. INTERACT EFFECTIVELY WITH THE MENTALLY IMPAIRED (ADVANCED)				X	X						X	X	X	X	X	X			X	X	X	X							
36. APPLY UNDERSTANDING OF COMMON DISEASES AND DISABILITIES												X						X											
37. APPLY KNOWLEDGE OF BODY STRUCTURE AND FUNCTION (ADVANCED)				X	X						X	X						X		X	X	X							
38. APPLY KNOWLEDGE/SKILL RE INSTRUMENTS AND TERMINOLOGY APPROPRIATE TO JOB	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
39. APPLY METRIC/S.I. SYSTEM AS APPROPRIATE TO JOB			X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
40. MAINTAIN POSITIVE ATTITUDE TOWARD LONG-TERM CARE			X	X	X	X	X		X	X		X	X	X	X	X		X	X	X	X	X	X	?	X	X			

next decade or two is likely to occur in such categories as employability skills, communication skills, and decision making skills. On the other hand, competencies dealing with the specific equipment and practices required in a particular technical program are likely to change most rapidly. The proposed structure, then, will permit quick change at the furthestmost extremes in Figure 2 and slower modification of competencies and modules closer to the center.

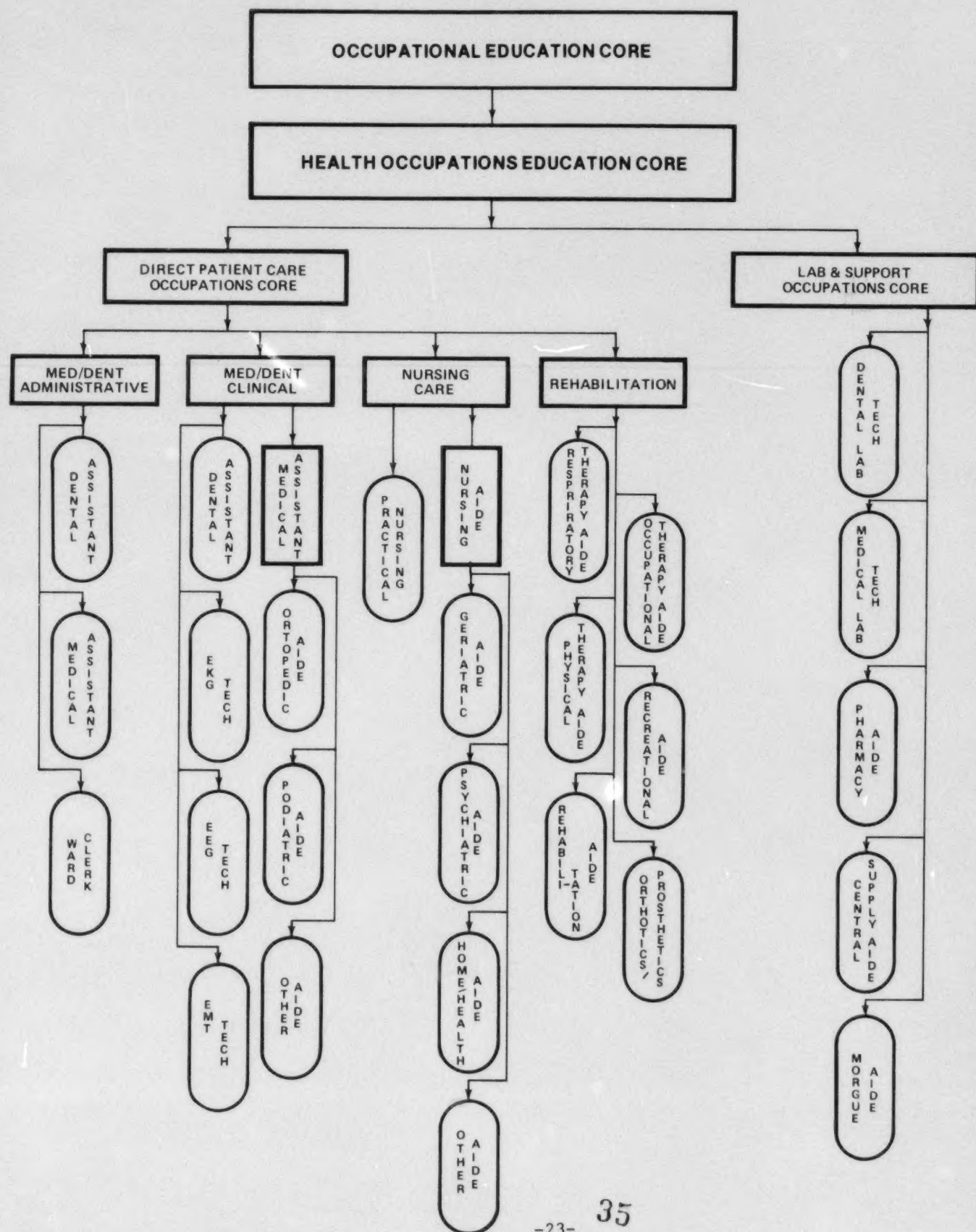
The recommended structure anticipates changes in all Health Occupations Education programs and provides an avenue for the rapid updating of skills in these areas so that programs can be updated with relative ease in the skills and procedures that graduates will be required to perform on the job. Maintaining programs which develop currently needed skills, at any point in time, is one major way of strengthening existing Health Occupations Education programs.

Providing Options to Students

In the present Health Occupations program students must elect the program of interest to them when they begin the Health Occupations Education sequence. If they decide to switch programs, it may lead to a loss of some credit or delayed graduation. The proposed reorganization postpones the point in time at which students have to make a choice. Since there will be a number of areas of core competency, such as the Health Occupations Education Core, the Direct Patient Care Core, and others, students will not be required to select a particular program until a later point in the sequence. Students will, therefore, have the opportunity to become familiar with competencies of a variety of Health Careers in the overall Health Occupations Core, more specific competencies in one of the two major areas, such as either Direct Patient Care or Laboratory and Support Services, and with competencies shared by a number of specific programs in a sub-area such as Rehabilitation. Mastery of these different competencies will enable students to make more intelligent choices with respect to the specific program in Rehabilitation, for example, they wish to enter since they will have had considerably more background data and experience at that time. Therefore, it is expected that the student's choice of a specific technical program will be based on more information in the reorganized structure than at present.

Figure 3 reproduced on the next page, displays a possible sequence in which competence can be achieved in the various cores leading to selected specialization.

Figure 3: Sequential Display of Curriculum Structure.



Maintaining Program Viability

The proposed reorganization is expected to make it easier to maintain viable programs in those areas where relatively few students elect a particular program. The increased viability is attributable to the fact that a variable percentage of the training students receive will be common to other programs. That is, since training in the Occupational Education Core, the Health Occupations Education Core and either Direct Patient Care or Laboratory and Support Services Core will be common to students in those categories, students interested in a program which attracts only a few candidates will share a large percentage of their training with those in other programs. This is especially true in those programs where there is a common subarea program core such as in the Rehabilitation area or the Medical Assistant Clinical area, as well as others. In such situations a local educational agency which has relatively few students in one program still may be able to offer that program as an elective since a good part of the training will not be specific to just that job title but will be shared with other Health Occupations Education programs in similar areas.

Costs

The fact that common curricular units will be utilized for the core preparation required by many job titles makes the expensive process of curriculum construction more cost-effective than would ordinarily be the case. These economies can be substantial in Health Occupations Education programs where preparation has to occur for a very large number of positions. Similarly, as indicated above, such economies make it possible to update the curriculum readily.

Recommended Curricular Organization

The Committee recommended that the curriculum for the revised Health Occupations Education program strike a middle course between competency-based and content-based organization. It was reasoned that such a course of action will enable a curriculum development team to specify clear-cut instructional objectives for practices, procedures and equipment presently being used. Simultaneously, it will enable identification of theoretical content which describes emerging procedures not presently in place. Specific objectives, of course, could not be stated for these latter practices. Such a curricular organization also makes it

possible to use existing instructional materials, including those developed under both the Instructional Support System for Occupational Education (ISSOE) and the Vocational Technical Education Consortium of States (V-TECS).

The Committee recommended that instruction in Health Occupations Education be easily adaptable to changing practices and equipment. It was also recommended that generic skills, that is, skills which enable students to adapt to change, and general principles for practice be emphasized in the new curriculum whenever possible. It was reasoned that in view of the rapid changes in society in general, and in the health occupations in particular, instruction in specific techniques and equipment becomes obsolete quickly, whereas the more generic skills may be readily adaptable to change.

The Committee recommended some general guidelines to the curriculum development team regarding the employment of varied instructional strategies whenever feasible. Some examples cited include techniques such as role playing, brainstorming, computer assisted and computer managed instruction and videotaping.

The Committee reaffirmed that the competencies previously mentioned be taught as vividly and in as realistic a manner as possible. The Committee further recommended that all of the Curriculum be taught in such a way as to be maximally relevant to the positions students hope to assume. Wherever possible, "hands on" experiences should be used so as to maintain the motivation of Health Occupations Education students.

Populations Served by Program

The Committee considered the various populations to be served by the revised Health Occupations Education program. It was recognized that in addition to the average secondary school and adult students, a variety of special populations must be given access to Health Occupations Education programs. Specifically, these include the handicapped and disadvantaged populations. Provision should be made in the new program structure for the special needs of these populations. For example, intellectually handicapped individuals make significantly slower progress through the curriculum than those classified as "average." Despite slower progress, however, such handicapped individuals may make excellent adjustments to a variety of health occupations and, in fact, may become highly valued employees.

The Committee, therefore, urges that a variety of provisions be built into the revised curriculum to ensure the following: 1) Continued access to Health Occupations Education programs be provided at secondary and adult levels to such special groups as disadvantaged and handicapped individuals of all kinds (provided that this access is not inconsistent with health and safety requirements for both students and patient populations). 2) Opportunities for access to Health Occupations Education programs be provided to under-represented segments of the population. For example, the medical and dental assisting titles frequently are limited to females even though an increasing percentage of men has entered these groups. Attempts should be made to recruit under-represented populations of all kinds for the sake of equity and so that different individuals will have successful role models with which to identify. 3) Adequate guidance and counseling regarding requirements of the programs, the availability of jobs in the health occupations and the likely earnings in these jobs be provided to students. It was reasoned that a variety of populations are under-represented in Health Occupations Education due to insufficient or inadequate guidance and counseling prior to entry to the programs. 4) Special sensitivity be shown to the special needs of some of the under-represented and disadvantaged populations. Such groups, since they have not typically entered Health Occupations Education programs or have encountered special difficulties in completing such programs successfully, may require special instructional support.

Supervised Clinical Experience

The Committee endorsed supervised clinical experience for those occupations having direct clinical contacts with patient populations and suggested that such experience may be optional for occupations without such contact. The Committee reasoned that such experience was necessary, since Health Occupations Education program graduates often are placed in situations having life or death consequences for the patients or clients they serve. The specific motion passed by the Committee was as follows:

Committee Recommendation: "Appropriate supervised clinical experience should be required to meet defined educational and performance objectives or clinical competence demonstrated in the work setting in those areas having direct patient contact, such as the following present occupations: Dental Assistant-

Clinical, Medical Assistant-Clinical, Podiatric Aide, Licensed Practical Nurse, Nurse's Aide, Geriatric Aide, Psychiatric Aide, Homemaker/Personal Care Services Provider, Home Health Aide, Emergency Medical Technician, Physical Therapy Aide, Rehabilitation Aide and similar occupations. The competence must be demonstrated to a certified (licensed) teacher-evaluator who is a qualified health professional.

Programs such as the following, in which students do not have direct patient contact, should not be required to have supervised clinical experience, but will be required to meet the usual performance and educational objectives: Dental Assistant-Administrative, Medical Assistant-Administrative, Ward Clerk, Recreational Aide, Dental Laboratory Technician, Medical Laboratory Technician, Pharmacy Aide, Central Supply Aide, Morgue Aide, Orthopedic Aide, EEG Technician, EKG Technician, Occupational Therapy Aide, Orthotics Prosthetics Aide, Respiratory Aide and similar occupations."

For clarification the Committee defined "work setting" and "qualified health professional." As used in this document "work-setting" is defined as a Health Care or related "real-world" setting in which actual patient care is being delivered, and "qualified health professional" is an individual who holds credentials appropriate to a field of practice for which the student is being prepared, or a professional qualified to supervise graduates in that field.

Teacher Education, Qualifications, and In-service Education

The Committee considered the issue of teacher qualifications in the revised Health Occupations Education curriculum. Since the Health Occupations Education programs prepare youth and adults for entry level jobs in health facilities, it is vitally important that teachers have practical on-the-job experience as health practitioners so that the curriculum can be made relevant to students preparing for employment. Simultaneously, it was considered important for Health Occupations Education teachers to have adequate general educational preparation to be able to adapt to the rapid pace of change in the health occupations and to prepare students with adequate communication, decision making and other generalized skills. Furthermore, it was considered important for Health Occupations Education teachers to have adequate teacher education preparation so as to be able to instruct students with the most up-to-date pedagogic procedures.

The importance of adequate inservice teacher education was also discussed. It was reasoned that the revised Health Occupations Education curriculum will require teachers to familiarize themselves with areas of knowledge, skills and competencies for which they previously were unprepared. It was, therefore, considered vital for adequate inservice teacher education to be implemented to prepare teachers already in the field to present the revised Health Occupations Education curriculum as effectively as possible. This rationale led to the following Committee recommendation:

Committee recommendation: "The Committee recommends that Health Occupations Education teachers have practical employment experience in their areas of specialty, adequate technical and general education, as well as teacher preparation. The Committee further recommended that adequate continuing teacher education be provided to prepare teachers for the revised Health Occupations Education curriculum."

Related Issues

The Committee considered a number of other issues in its deliberations. The Committee's recommendations regarding these are described below.

Licensure and Credentialing

The Committee reviewed the credentialing and licensure practices in various health occupations. The Committee recommended that the essential purpose of licensing, namely, protecting the public, be kept in mind in future attempts to attain licensure for health occupations personnel.

In general, licensure and credentialing is also a technique used by a variety of occupations to obtain status and prestige. It was strongly recommended by the Committee that other means of enhancing the status of occupations be considered. An important avenue for accomplishing such an objective would be to create an educational sequence which enables students to view a career ladder in the health occupations, rather than focus on only one particular job. The Committee recommended articulating instructional sequences so that students could view a career of increasing responsibility, prestige and remuneration in the health occupations rather than prepare for only one specific occupation which may be a "dead end" with respect to transfer or preparation for other health occupations.

Articulation

The Committee recommended that institutions located in geographic proximity which are offering related programs for the preparation of health care personnel, articulate to the maximum degree possible. Such articulation should have twin purposes: to reduce unnecessary duplication of instruction and to maximize career mobility to the fullest extent. New programs applying for approval/registration and existing programs applying for re-approval/re-registration should be required to submit an indication of efforts toward articulation before action is taken by the State Education Department.

The Committee also recommended that articulation of Health Occupations Education programs with related secondary and adult programs be pursued whenever possible to reduce duplication of requirements. Health Occupations Education programs should specify the distinction between knowledge and skills to be covered in the Health Occupations Education curriculum and those in other programs of study.

Student Evaluation Policy in Health Occupations Education

The Health Occupations Education Review Committee recommended that one essential consideration in implementing the evaluation of student progress in the revised program should be assessment of all essentials for safe practice in each curricular area. That is, those practices, skills and areas of knowledge judged necessary for the safe care of clients/patients must be included in the evaluation. All students should be required to attain mastery of these practices at a satisfactory level.

The Committee further recommended that the evaluation system be appropriate to the curricular content and skills to be assessed. That is, where mastery of a clinical skill is assessed the evaluation should be in the form of examining the behaviors in a context similar to that in which the skill is to be practiced in the field. On the other hand, where the content is in the form of knowledge or skills required in the future, a traditional evaluation instrument for such content (multiple-choice, matching, short answer, and essay) may be appropriate.

Irrespective of the particular evaluation strategy selected, the Committee recommended that the examination be prepared with all necessary concern for its

reliability, validity and objectivity in scoring and administrative procedures.

The Committee recommended that evaluation of competence be implemented on a statewide basis. The evaluation process selected should take into account the variety of student populations enrolled in the various programs and, where feasible, provide examination procedure options appropriate to those different populations. Finally, wherever possible students having equivalent experience should be given the opportunity to obtain advanced standing if they can demonstrate competence.

Guidance

The Committee also discussed the importance of providing adequate guidance services for the Health Occupation Education curriculum. Following input from the Guidance Bureau the Committee recommended that close contacts be maintained with guidance counselors in New York State. Such content would help keep the guidance community informed regarding the revised Health Occupation Education program. Since every student has the right to choose a vocational education program it is vital that guidance counselors become familiar with Health Occupations Education policies, procedures and curriculum options at least a year in advance of their implementation in order to help students adequately plan their programs of study. The Committee recommended continued close contact with the guidance community to exchange information regarding the health care industry's personnel needs in the different regions of the state and available programs preparing students for those positions. Close articulation with guidance counselors is necessary to help students develop appropriate career plans in the health occupations.

The Committee also recommends collaboration with guidance counselors to help students develop appropriate career planning skills.

Commissioner's Regulations

In order to implement the revised Health Occupations Education curriculum modifications will be required in the Commissioner's Regulations, the legal basis for education in New York State. The Committee decided that recommendations for modification of these regulations would not be offered solely for Health Occupations Education, since it would be more advisable to recommend modifications of all Occupational Education programs at one time. The Committee, therefore, recommended that modification of the Health Occupations Education regulations be

postponed until the comprehensive futuring project is completed, when regulations affecting all Occupational Education programs could be modified simultaneously.

Cost

The Committee considered the cost implications of its recommendations. It was anticipated that the revised program will be somewhat more cost effective than the prior program. Economies are expected to result from the more efficient use of time, staff, facilities, and common curricular units wherever possible.

The recommendations will result in significant economies by making rapid, cost-effective updating of the curriculum possible and by enabling students to keep abreast of the rapidly changing practices and procedures in the health field. The Committee recommended that the presentations regarding the cost of the revised curriculum, commissioned by the Committee, be submitted to the curriculum writing teams to guide their efforts.

Student Recognition

The Committee recommended that appropriate recognition be conferred upon students successfully completing Health Occupations Education programs. Such recognition might take the form of a printed document indicating mastery of specified competencies.

Employability of Health Occupation Education Graduates

The Committee discussed the job placement of graduates from secondary and adult Health Occupations Education programs. Reports of the current employability of graduates vary among different occupational titles, between and within regions of the State, and between the policies reported and actually practiced by health provider institutions. The Committee felt that its study of future trends in the health field led to the recommendation of a Health Occupations Education Program which will supply health personnel able to perform effectively the responsibilities of the jobs for which they are prepared.

A continuation of the dialog with employers is recommended in order to accomplish the following ends:

- 1) Monitor emerging staff needs;
- 2) Update the skills required on the job;
- 3) Keep employers informed of program revisions;
- 4) Inform employers of the hiring practices of other institutions around the

state and within their regions;

- 5) Continue to keep employers abreast of the roles Health Occupations Education program graduates can assume.

Support for Programs

The Committee recommended that contact be maintained with interested individuals and groups in the community to inform them and involve them in developments in Health Occupations Education. Special efforts should be directed toward maintaining dialogue with parents.

FOOTNOTES

¹"Examination of the Health Occupations Education Curriculum from a Futurist Perspective: I." Institute for Research and Development in Occupational Education, Center for Advanced Study in Education, The Graduate School and University Center of the City University of New York, October 1980.

²"Examination of the Health Occupations Education Curriculum from a Futurist Perspective: II." Institute for Research and Development in Occupational Education, Center for Advanced Study in Education, The Graduate School and University Center of the City University of New York, October 1981.

³"Examination of the Health Occupations Education Curriculum from a Futurist Perspective: III." Institute for Research and Development in Occupational Education, Center for Advanced Study in Education, The Graduate School and University Center of the City University of New York, October 1982.

⁴"Looking Towards the Future." A Report by The Statewide Business Education Review Committee. Institute for Research and Development in Occupational Education, Center for Advanced Study in Education, The Graduate School and University Center of the City University of New York, 1979.

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